In the Claims:

Claim 1 (currently amended): A method comprising steps of:

forming a layer over a transistor gate region and a field oxide region, said transistor gate region being situated over a well and said field oxide region not being situated over said well;

forming a doping barrier above said layer over said field oxide region;

doping said layer over said transistor gate region with a dose of a first dopant, wherein said dose of said first dopant is a dosage greater than required to result in said layer over said transistor gate region having transistor gate electrical properties, wherein said first dopant has a first conductivity type;

removing said doping barrier;

doping said layer over said transistor gate region and said field oxide region with a second dopant so as to form a high resistivity resistor in said layer over said field oxide region without affecting said transistor gate electrical properties, wherein said second dopant has a second conductivity type;

doping a portion of said layer over said field oxide region with a third dopant so as to form a high-doped region in said layer over said field oxide region, wherein said third dopant has said second conductivity type;

fabricating a contact region for said high resistivity resistor over said high-doped region.

Claim 2 (canceled).

Claim 3 (original): The method of claim 1 wherein said layer comprises polycrystalline silicon.

Claim 4 (previously presented): The method of claim 1 wherein said transistor gate region is a gate of an PFET.

Claim 5 (previously presented): The method of claim 1 wherein said transistor gate region is a gate of an NFET.

Claim 6 (original): The method of claim 1 wherein said field oxide comprises silicon dioxide.

Claim 7 (original): The method of claim 1 wherein said first dopant is an N type dopant.

Claim 8 (original): The method of claim 7 wherein said N type dopant comprises phosphorous.

Claim 9 (previously presented): The method of claim 1 wherein said first dopant comprises phosphorous at a dose of approximately $6.5x10^{15}$ atoms per square centimeter.

Claim 10 (original): The method of claim 1 wherein said second dopant is a P type dopant.

Claim 11 (original): The method of claim 10 wherein said P type dopant comprises boron.

Claim 12 (previously presented): The method of claim 1 wherein said second dopant comprises boron at a dose of approximately $1.0x10^{15}$ atoms per square centimeter.

Claim 13 (previously presented): The method of claim 1 wherein said contact region comprises a silicide.

Claim 14 (currently amended): A method comprising steps of:

depositing a polycrystalline silicon layer on a chip, said polycrystalline silicon layer including a gate region and a resistor region, said gate region being situated over a well and said resistor region not being situated over said well;

forming a doping barrier above said polycrystalline silicon layer so as to prevent doping of said resistor region of said polycrystalline silicon layer;

doping said polycrystalline silicon layer with a dose of a first dopant, wherein said dose of said first dopant is a dosage greater than required to result in said layer over said gate region having transistor gate electrical properties, wherein said first dopant has a first conductivity type;

removing said doping barrier;

doping said polycrystalline silicon layer with a second dopant so as to form a high resistivity resistor in said resistor region of said polycrystalline silicon layer without affecting said transistor gate electrical properties, wherein said second dopant has a second conductivity type;

doping a portion of said resistor region of said polycrystalline silicon layer with a third dopant so as to form a high-doped region in said resistor region, wherein said third dopant has said second conductivity type;

fabricating a contact region over said high-doped region in said resistor region of said polycrystalline silicon layer, said contact region being electrically connected to said resistor region.

Claim 15 (original): The method of claim 14 wherein said doping barrier comprises photoresist.

Claim 16 (canceled).

Claim 17 (previously presented): The method of claim 14 wherein said step of doping said polycrystalline silicon layer with a first dopant comprises doping said gate region.

Claim 18 (original): The method of claim 14 wherein said first dopant is an N type dopant.

Claim 19 (original): The method of claim 18 wherein said N type dopant comprises phosphorous.

Claim 20 (previously presented): The method of claim 14 wherein said first dopant comprises phosphorous at a dose of approximately $6.5x10^{15}$ atoms per square centimeter.

Claim 21 (original): The method of claim 14 wherein said second dopant is a P type dopant.

Claim 22 (original): The method of claim 21 wherein said P type dopant comprises boron.

Claim 23 (previously presented): The method of claim 14 wherein said second dopant comprises boron at a dose of approximately $1.0x10^{15}$ atoms per square centimeter.

Claim 24 (canceled).

Claim 25 (previously presented): The method of claim 14 wherein said contact region comprises a silicide.